

**FIRE DEPARTMENT MECHANIC
STUDY GUIDE**

A written examination for the class of **FIRE DEPARTMENT MECHANIC** to be administered in **BOSSIER CITY** on **SEPTEMBER 20, 2016**, will consist of approximately **100** multiple-choice questions. The examination will test your knowledge in the following subject areas:

SUBJECT AREA/KNOWLEDGE	APPROXIMATE % OF EXAM
SUSPENSION AND BRAKE SYSTEMS Knowledge of suspension and brake systems sufficient to perform maintenance, make repairs, or adjust the systems when needed.	11.0%
COOLING SYSTEM Knowledge of cooling systems sufficient to perform maintenance and repair when needed.	6.0%
DRIVE TRAIN/LUBRICATING/ELECTRICAL/EXHAUST AND EMISSIONS /FUEL SYSTEMS Knowledge of drive train, lubricating, electrical, exhaust and emissions, and fuel systems sufficient to perform maintenance, repairs or adjustments to the system when needed.	28.0%
ENGINE MECHANICS Knowledge of gasoline and diesel engines sufficient to perform diagnosis of mechanical problems and to perform maintenance and repair.	11.0%
GENERAL AUTOMOTIVE MAINTENANCE, REPAIRS, INSTRUMENTS & TOOLS Knowledge of automotive equipment sufficient to troubleshoot, diagnose, and repair any malfunctioning components, and the use and care of instruments and tools needed.	11.0%

SUBJECT AREA/KNOWLEDGE	APPROXIMATE % OF EXAM
INSPECTION, MAINTENANCE, TESTING AND REPAIR OF PORTABLE EQUIPMENT Knowledge of portable equipment, tools, and accessories commonly carried on fire apparatus sufficient to perform maintenance and repairs, including self-contained breathing apparatus, lighting equipment and tools, portable pumps and generators, water towers, power saws, lawn mowers, and edgers.	17.0%
MANAGING EQUIPMENT/SUPPLIES Knowledge of the procedures required to manage equipment and supplies for the department, including delivering, and picking up supplies, providing for storage of self-contained breathing apparatus, and organizing and storing department property, equipment, and supplies in an orderly fashion to allow ease of locating and retrieving materials.	10.0%
MAINTENANCE AND REPAIR OF HYDRAULIC EQUIPMENT Knowledge of hydraulic equipment sufficient to perform maintenance and repair, including pumps, aerial ladders, and hydraulic systems.	6.0%

REFERENCE LIST

While the entire list of reference material will be useful to you in your preparation for the upcoming examination, the **majority** of test questions are sourced from those references listed under the Primary List.

PRIMARY REFERENCE MATERIAL

MODERN AUTOMOTIVE TECHNOLOGY, James E. Duffy, The Goodheart-Willcox Co., Inc., 2004.

INTERNATIONAL FIRE SERVICE TRAINING ASSOCIATION (IFSTA)/ FIRE PROTECTION PUBLICATIONS (Training Manuals):
Aerial Apparatus Driver/Operator Handbook, 1st ed., 2000.

The local civil service board should make this study guide available to all applicants in whatever manner the board deems appropriate.

While there are no provisions requiring this office to provide study guides for any competitive or promotional examinations, such material will be provided as a service to assist applicants in preparing for an examination. The State Examiner's office has no control whatsoever over the local availability of reference material (mentioned in the study guides), nor do we feel constrained to limit examination questions to only that material which is available locally. Examination content, weighting of subject areas, and length of examination, may vary with each administration of an examination to reflect any updated job analysis information. Percentages and numerical estimations are provided as approximations.